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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,180	04/26/2006	John Welin-Berger	4007528-184776	4053

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PORTER WRIGHT MORRIS & ARTHUR, LLP  
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COLUMBUS, OH 43215

EXAMINER
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PO, MING CHEUNG

ART UNIT	PAPER NUMBER
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1771

MAIL DATE	DELIVERY MODE
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08/03/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/577,180	<b>Applicant(s)</b> WELIN-BERGER, JOHN	
	<b>Examiner</b> MING CHEUNG PO	<b>Art Unit</b> 1771	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 May 2011.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 33-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 33-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This is the response to amendment filed on 05/23/2011 for application 10/577180.
2. Claims 33-50 are currently pending and have been fully considered. Claims 1-32 have been cancelled.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 33-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over DAWSON et al. in view of REMEROWSKI (U.S. 6,053,108).

Regarding claims 33 and 35, DAWSON et al. teach a lighter or lighter apparatus for igniting fireworks. The lighter comprises a carrier tape with a face coated with adhesives and a strip of fuel such as gunpowder and a second tape that adheres to the first face of the carrier tape to cover the strip of fuel.

DAWSON et al. do not seem to explicitly teach what the two strips may be comprised of paper and polyethylene.

However, REMEROWSKI teaches a propellant strip assembly. The propellant strip assembly is taught as Fig 6. According to lines 24-51 of column 9, the propellant strip is composed of a carrier strip, a cover strip, a propellant disk and a sensitizer

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structure. The carrier strip may be composed of polyethylene (**polyethylene strip**).

The cover strip may be composed of treated paper (**paper strip**). The carrier strip and the cover strip may be fastened together by use of an adhesive or the like to form strip assembly with propellant disks (**paper strip and plastic strip are partly united to each other at opposite surfaces**).

It would be obvious to one of ordinary skill in the art to use a paper strip and a polyethylene strip as the carrier tape and the second tape of the lighter that DAWSON et al.

The motivation to do so can be found in lines 24-50 of column 9 of REMEROWSKI et al. REMEROWSKI et al. teach that the treated paper and polyethylene are strong flexible materials for use in creating a strip assembly.

DAWSON et al. teach, in lines 40-47 of column 3, that the lighter may be stored on a roll by coiling the lighter upon itself. DAWSON et al. do not seem to explicitly teach that the assembly may be sufficiently tightly wound so that the assembly is adapted to resist lighting by an outside fire or that it may be unwound to a non-compacted state adapted for lighting and are operable in their non-compacted state to partially realign elastically to form a ball structure.

However, there is no reason to believe that the propellant strip assembly that DAWSON et al. would be incapable of doing something that strips are commonly expected to be able to do. The reason that a wound roll is resistant to lighting by an outside fire is known to one of common skill in the art. Fire requires oxygen to burn. A wound roll restricts the availability of oxygen which resists lighting by an outside fire.

Therefore, the invention as a whole would have *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Regarding claim 34, an unwound roll naturally allows oxygen in the air to be used in igniting the lighter.

Regarding claim 35, DAWSON et al. do not seem to explicitly teach that the strip assembly is capable of supporting firewood resting against said ball structure.

However, there is no reason to believe that the spiral foundation can not support pieces of firewood resting against said ball structure.

Regarding claim 36, DAWSON et al. do not seem to explicitly teach that the paper strip has an edge configuration adapted for providing a rapid lighting sequence.

However, DAWSON et al. teach a lighter so, therefore, the entire paper strip including the edge configuration is adapted for providing a rapid lighting sequence.

Regarding claim 37, DAWSON et al. do not seem to explicitly teach a desiccant.

However, it would be obvious to one of ordinary skill in the art to add a desiccant since desiccants are known in the art as a method to ensure dryness and water is known to be adverse in lighting gunpowder.

Regarding claims 38 and 40, DAWSON et al. do not seem to explicitly state an inner end portion or pole of the coordinated strips is formed or has a tab grip able hand.

However, it would be obvious matter of design choice to have an inner end portion or pole of the coordinated strips is formed or has a tab grip able hand since applicant has not disclosed that having an inner end portion or pole of the coordinated strips is formed or has a tab grip able hand solves any stated problem or is for any

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particular purpose and it appears that the invention would perform equally well without an inner end portion or pole of the coordinated strips is formed or has a tab grip able hand.

Regarding claim 39, DAWSON et al. do not seem to explicitly teach that the strip assembly is rolled into a quadratic outer shape.

However, it would be a matter of design choice to roll the strip assembly that DAWSON et al. teach into a quadratic outer shape since applicant has not stated that the quadratic outer shape solves any specific reason or is for any particular purpose and it appears that the invention would perform equally well rolled up but not in a quadratic outer shape.

Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Regarding claim 41, DAWSON et al. do not seem to explicitly state that the two strips have substantially the same thickness.

However, it would be a matter of design choice to have the two strips with substantially the same thickness since applicant has not stated that having the two strips with substantially the same thickness solves any specific reason or is for any particular purpose and it appears that the invention would perform equally well with different thicknesses.

Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Regarding claim 42, DAWSON et al. teach, in lines 65-67 of column 1, and lines

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1-7 of column 2, that the two strips may be fastened by the use of adhesives.

Regarding claim 43, DAWSON et al. do not seem to explicitly state that the strips have a length of at least 5 meters.

However, it would be a matter of design choice to have a strip with a length of at least 5 meters since applicant has not stated that having the length solves any specific reason or is for any particular purpose and it appears that the invention would perform equally well with a length less than 5 meters.

Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Regarding claims 44, 45, 46, 47, and 48, DAWSON et al. do not teach how the propellant strip assembly would be packaged in or packaged with what.

However, it would be a matter of design choice to place it in a dispenser or a plastic, cardboard or paper package or with a set of matches and a lighter, and a striking surface, since doing so does not solve any specific reason or is for any particular purpose and it appears that the invention would perform equally well packaged with any other items.

Regarding claim 49, DAWSON et al. teach, in lines 5-18 of column 3, that the fuel supply is enclosed by the carrier tape and the second tape.

Regarding claim 50, DAWSON et al. teach the use of gunpowder.

***Response to Arguments***

5. Applicant's arguments with respect to claims 2, 4, 5-14, 20-23, and 26-32 have been considered but are moot in view of the new ground(s) of rejection.

Applicant has cancelled claims 1-32 and added new claims 33-50. Independent claims 33 and 49 are combinations of dependent claims that were not combined together in previous claims.

Applicant argues that claim 33 include the limitation wherein no "additional energy-raising and/or combustion-improving and/or smoke forming substances other than the paper layer and the plastic layer". This is unconvincing because claim 49 explicitly teach pockets of energy-raising substances and/or combustion-improving and/or smoke-forming substances. Claim 33 is written with the transitional phrase "comprising" which is open-ended language and does not exclude additional unrecited elements or method steps. Although claim 33 excludes any "additional energy-raising and/or combustion-improving and/or smoke-forming substances," it is unclear what energy-raising and/or combustion-improving and/or smoke-forming substances is considered already part of the assembly and not additional. Applicant is encouraged to use the transitional phrase "consisting of" to exclude any energy-raising and/or combustion-improving and/or smoke-forming substances beyond the paper strip and the plastic polyethylene strip if applicant is implying that the lighting strip assembly only comprises a thin paper strip and a thin polyethylene plastic strip.



***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MING CHEUNG PO whose telephone number is (571)270-5552. The examiner can normally be reached on 9:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571)272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ming Cheung Po/  
Patent Examiner  
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